REMARKS

The Examiner is respectfully requested to clarify which claims have been indicated as being allowable. On Form PTOL-326, claims 19, 22-26 and 28 were indicated as being allowable, but on page 10 of the action, claims 22-28 were indicated as being allowable. Yet, the action appears to suggest that only claims 22-26 were deemed allowable.

On the merits, applicants respectfully request reconsideration that main claim 15 is obvious over newly cited U.S. Patent Publication No. 2006/0245763 to Ishida in view of U.S. Patent No. 6,865,348 to Miyamoto.

Claim 15 requires: "*an electro-optical modulator having at least one element with* ***an optical path length adapted to be modified by an electrical driver signal*** *for intensity modulating the optical carrier based on the driver signal;*" (emphasis supplied).

The Examiner interpreted the Mach-Zehnder interferometer 2 disclosed by Ishida as the ***electro-optical modulator*** required by claim 15, and also interpreted the optical electrodes 21-1 and 21-2 disclosed by Ishida (Fig. 2) as the ***at least one element of the electro-optical modulator*** of claim 15.

However, claim 15 requires that the at least one element has ***an optical path length adapted to be modified by an electrical driver signal***. This is not disclosed by Ishida and not discussed by the Examiner at all.

Ishida discusses the optical electrodes 21-1 and 21-2 only in paragraph 0040 of the description. This paragraph says ***nothing*** about either of the optical electrodes 21-1 or 21-2 having an optical path length adapted to be modified by electrical signals supplied to them.

In fact, Ishida does not require any variable optical path length of any of the optical electrodes 21-1 or 21-2, because the electrical signals supplied to the optical electrodes already have reverse phases. These reverse phases are required for generating the optical RZ-DPSK signal (see paragraph 0046). If at least one of the optical electrodes 21-1 or 21-2 would have a variable optical path length, then this would result in an additional phase shift caused by the varying optical path. In this situation, controlling the phase shift would be more complicated than in the case of simply supplying the input signals F and G (Fig. 3 and Fig. 4 of Ishida) with a desired phase shift.

Clearly, Ishida does ***not*** disclose or suggest having at least one of the optical electrodes 21-1 or 21-2 with an optical path length adapted to be modified by an electrical driver signal. In Ishida, the required phase shift is realized in the electrical domain. There is no need to change it in the optical domain.

Miyamoto also fails to disclose or suggest at least one element in a Mach-Zehnder interferometer that has an optical path length adapted to be modified by an electrical driver signal. In consequence, the combination of Ishida and Miyamoto results in a solution that is different from the one claimed in claim 15.

Ishida clearly teaches obtaining the desired phase shift in the electrical domain, and this fact teaches ***away*** from obtaining the desired phase shift in the optical domain. Moreover, any modification of Ishida related to obtaining the desired phase shift in a different way would result in an additional complication and, in consequence, would be dismissed by a person of ordinary skill in the art.

Applicants respectfully submit that claim 15 and all its dependent claims are new and non-obvious over the applied art.

Wherefore, a favorable action is earnestly solicited.

Respectfully submitted,

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